VACAVILLE, CALIFORNIA **March, 2017**

THE VVRC WELCOMES YOU

The Vaca Valley Radio Club has proudly served the Northern Solano County Area since 1988. We pride ourselves in providing a friendly place for radio amateurs to meet and improve their operating skills.

We participate in public service events throughout the year and are always ready to assist with communications during times of emergency.

Browse our website for more information about our club. If you have any questions please e-mail us at w6vvr@w6vvr.net or call 707-448-5665 for assistance

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143, An ARRL Affiliated Club. Founded 1987, Chartered 1988. General Meetings: 2ndThursday of each month at 7:00 PM See map on last page.

Wheelchair accessible

Visit the Repeater online courtesy of Bob K6HEW at: w6vvr.net

Club repeater in Vacaville:w6vvr.net 145.470 MHz(-) pl 127.3
The W6VVR net call is Tuesday evenings at 8pm on the club repeater. All are invited to participate in this weekly meeting on the air. 73!

Additional local repeater
WV6F 440.025(+) pl 127.3

2017 Officers

President: Frank Garay KJ6RWQ
VP:Doug Hollowell KJ6VHE
Treasurer: Bob Hewitt-K6HEW
Secretary: Brian Hagen-KK6BXP
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Arthur Miller KI6UXE
Kevin Stow N6VLF
Bob Hawkins KM6BXZ
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VVRC Net Control Chairperson
Club Activities Chairperson-Frank Garay-KJ6RWQ
Newsletter Editor-Jerry Bowen, KJ6SCC
Newsletter Publishe/ Distributor-Bob Hewitt, K6HEW

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President's Message

It's another glorious month to be a Ham Radio Operator! In my message this week I wanted bring up a cool event that you'll probably be able to participate in coming this May. As I've stated before, I'd like us to get more involved with other clubs and thanks to our VP - Doug - KJ6VHE, we have a connection to the Yolo Amateur Radio Society (YARS). YARS provides radio services to the Cache Creek Ridge Ride. The Cache Creek Ridge Ride is a two day horse event that will take place May 6-7 this year.

The event consists of two trails, a 25 mile trail and a 50 mile trail. There are check points along the way and vet checks as well. As a radio operator you would be at one of the check points for a set period of time. You'll check the horses and riders as they come through your check point and report their arrival and departure to net control. This is so all horses and riders are accounted for during the event. As you can imagine there is a need for several radio operators to help with the event, especially because there is little to no cell phone coverage around the course. At our last meeting, some of our members who have done this event before said it was a very fulfilling event to do as the riders were extremely appreciative of the help that the radio operators provided.

As we get closer to the event we will keep our club members updated on how to get signed up. Hey this is pretty much what we live for right? Assisting others with communications where no other communication services are available. How cool is that? Hey as far as I can tell this is right in line with our goals this year. Will this be educational? Yes. Will we be helping our local community? Yes. Will this be FUN? YES!

So stay tuned to your email, do your best to get on the Tuesday Net's & Net Plus's and try to make the meetings at the Nut Tree Airport for more information on this event and more to come!

73!
Frank Garay
KJ6RWQ

WARNING!

All generalizations are false, including this one.

Mark Twain

VVRC FEBRUARY MEETING NOTES.

"The meeting of the VacaValley Radio Club was brought it to order at 7pm. The Pledge of Allegiance to the flag was held.

Two first time visitors were present;

Sherry, KM6FNH And

Carl, KM6FMJ

Hope you folks enjoyed the club and of course we encourage you to join.

Those who are currently "Tech" Licensees were encouraged to go to Benicia and upgrade their tickets to "General Class! (See flyer on page 11.

Then Doug KJ6VHE went over a Yolo YARS event in May for a horse ride event. He will provide us with more info in the future.

Bruce N6THN, provided more info on a variety of directional antennas including loops, yagis an RF probe and very interesting unit with two dipoles at each end in sort of a yagi formation that provides great directional accuracy.

Jason, KM6FAK has placed a video on the Facebook feed for the VVRC. The Youtube address is:

https://youtu.be/aCDNjlF_K6g

The meeting adjourned at 9 pm

Secretary: Brian Hagen-KK6BXP

Skip, AF6HC's Latest confirmed DX catch

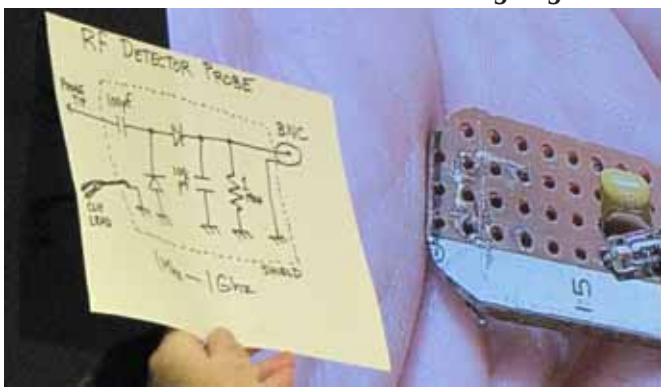
N6THN's Lecture on RDF Antennas

Another timely and highly informative presentation by Bruce that is making the VacaValley Radio Club a great organization to be a part of.

The room was filled with a majority of members including new visitors during Bruce's presentation.

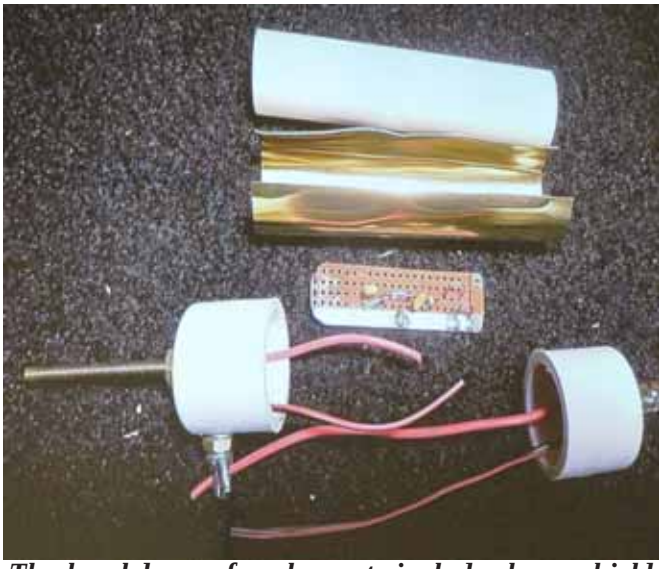
Bruce smiles as he prepares to start his lecture

A loop antenna gets the going over



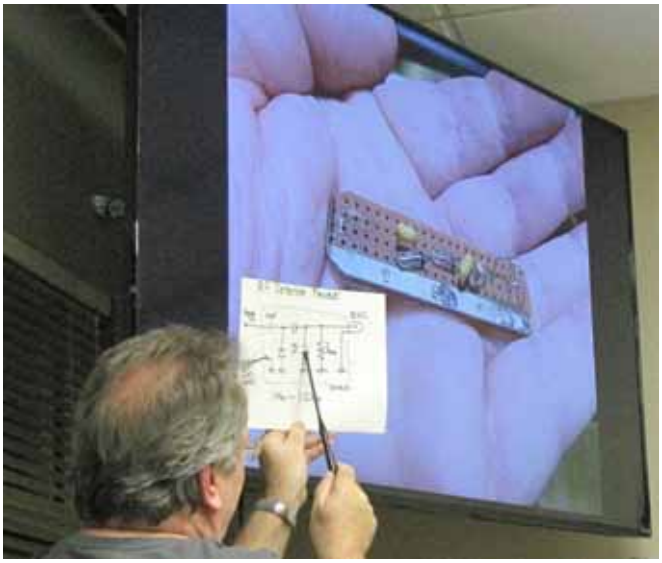
A High Frequency Probe for detecting noise

The probe's layout on a perf board



The breakdown of probe parts includes brass shield to prevent a hand from affecting the reading

The signal is that-a-way!



Bruce describes the layout of parts as related to the schematic along with the details of each component

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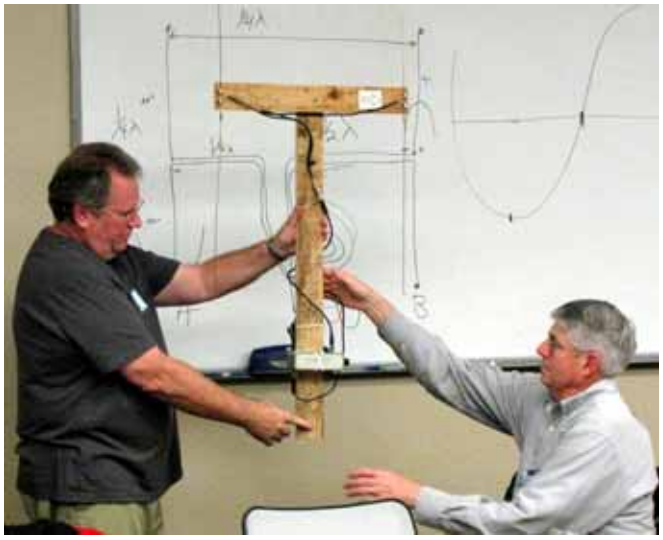
Now this needed explanation

So Bruce described it. It's a dual dipole yagi.



A lengthy technical explanation revealed it as a very accurate RDF

The evening's discussions concluded with display and explanation of RDF projects such as Bob, KM6BMZ's Yagi RDF

M6FAK's Excellent Use of the WEB Enhances Information about the VacaValley Radio Club

Having never been a fan of the so-called social networks I have managed to mostly ignore them unless I knew of a particular item I wanted to see.

During the last meeting of the VVRC I found that because my poor hearing I missed way too much of the excellent presentation by Bruce, N6THN.

Now, thanks to the efforts of Jason, KM6FAK, to record Bruce's presentation, online I was able to see and hear all of it.

Let me explain; I'm hard of hearing, hard headed and old fashioned. I have not been able to learn much from the club's presentations, so I was wasting an awful lot my time.

I decided to watch Jason's video and Wow! I was missing a lot of great information. Yeah…I had to peek and now I'm hooked. By turning up the volume on the computer and using earphones there it all was and I want to take this time to thank Jason for using his skills to enhance the work of the club.

Though I have never liked stuff stuck into my ears I'm going have to get my Veteran's card and get me one of those free hearing aids that are available. My ears will just have to get used to them and I won't be using the excuse any more that it was just blissfully peaceful and at times when the XYL wanted me to do something I didn't want to do I sometimes got away with it.

Thank you Jason for your excellent work. You set a good example to the rest of us by taking time to do what you do well.

Jerry, KJ6SCC

By The Way

Has anyone seen my bicycle? I can't find it and don't remember where and when I parked it.

THE BIT BUCKET

Field Day 2017 Packet is Now Available

The Field Day 2017 packet now is available from the ARRL website. Field Day 2017 is June 24-25 — always the fourth full weekend in June. There have been no significant rule changes from 2016. The Field Day packet contains everything you or your club will need to succeed in June, including explanations, FAQs, articles from experts, and even a log page template, if you log on paper for FD. For more information on Field Day, contact the the ARRL Contest Branch.

VHF/UHF DX Book, 2017 Replica Edition available online

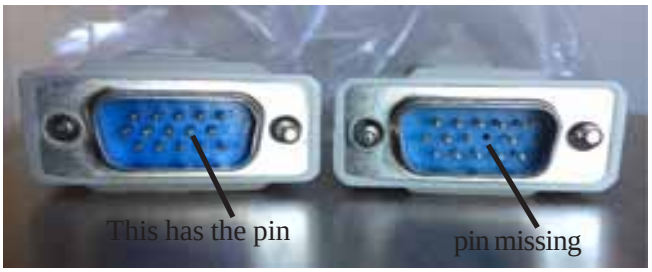
The *VHF/UHF DX Book, 2017 Replica Edition* is now a free download courtesy of TRPublishing. According to the publisher, "The VHF/UHF DX Book was written in the early to mid-1990s by a team of experienced VHF/UHF DXers and equipment developers, in an effort to pass on our knowledge and stimulate further developments." A cautionary statement is also provided: "Please do not try to duplicate the construction projects in this book. These designs are over 20 years old and many of the components are no longer available. More modern designs are available today, so seek them out and use those instead." The Website is:

http://www.trpub.net/assets/applets/VHF-UHF_DX_Book.pdf

and is 446 pages long.

(Ian, GM3SEK via UKSMG via PNWVHFS)

Well, I finally got all my firewood stacked



Problem With 15 pin Y cables

A recent re-order of some 15 pin Y cables for bandpass filters yielded an unpleasant surprise. The supplier's source must have changed, as the most recent cables don't include a pin essential for the band data function. Older cable end on the left, newer one on the right. This would have been a fun one to find when the first band change occurred during the contest.

Identifying man-made signals on Waterfall Displays Guide

Identifying man-made signals you might hear or see on your waterfall display might be made easier with the Signal Identification Guide Wiki. Signals of all types, including Over The Horizon (OTH) RADARs, digital data transmissions, and encrypted communication formats, are listed. Descriptions include sample audio as well as waterfall displays. (Dennis, N6KI)

http://www.sigidwiki.com/wiki/Signal_Identification_Guide

A 160 Meter Antenna for Postage Size Lots

This antenna is designed for stations having a difficult time putting a **DECENT SIGNAL ON 160 METERS** from small or CC&R'd lots. It is a 25 ft. vertical antenna, made from three 10 ft. PVC sections bolted together, and ½ wavelength of antenna wire helically wound around the PVC sections. A capacitance hat is on top, and the antenna is fed with a 50-ohm feedline. A downloadable construction manual is posted on K6mm's website here:

http://k6mm.com/antennas/160M.pdf

NET CONTROL OPERATORS

1st week of month-Jerry , KJ6SCC
2nd week of month-Marcus , KI6WDX
3rd week of month-Frank, KJ6RWQ
4th week of month-Brian , KK6BXP
On months with 5 weeks-Hewitt, K6HEW

Here's a couple of low cost testers that, so far, seem to work pretty good for use in the old carry around tool bag

Excelvan M6013 Digital Auto Ranging

Capacitor Tester

The M6013 digital auto-ranging capacitance meter tester from Excelvan, has a large measuring range and with its V2 function can read up to 470mF. This capacitance tester has multifunction high-resolution displays. It has a five-digit scale capable of measuring 0.01pF to 470mF (470000uF) as well as a 28X64 dot matrix LCD. It includes an auto-running averaging function and can read pF with more accuracy. It can use 5V USB as external power and reading a 2200uF only takes ~0.2s.

Product specification has accuracy up to 1% though it may be affected by the test lead's length. When testing pF a shortest test lead possible is recommended. Surrounding EMI or RF noise may affect pF readings. It uses two AA 1.5V batteries (not included). The batteries provide more than 80 hours operating time. Its weight is 10.6 ounces and its product dimension is 4 x 2.3 x 7.1 inches. This product originates from China and can be purchased from Amazon..

Specification:

Range	Accuracy (After Zero, tested with 1nF, 1uF, 1000uF)	Refresh Time (Manual Mode) *Auto mode take 0 to 2s more time depend on value Larger capacitance take more measuring time
0.01pF to 47.000nF	1%+2Digit	~0.2s to 1s
47.00nF to 47.000uF	1%+1Digit	~0.2s to 2s
47.00uF to 470.00mF	1 to 3%+1Digit (Larger capacitance will have larger error)	~0.2s to 30s

***Accuracy maybe affected by the test lead's length and distance of test leads. Especially testing pF small capacitance, shortest test lead is recommended, and be careful the surrounding EMI or RF noise may affect the pF reading.**

I found this at Harbor Freight on sale. It seems to work OK in all the following functions:

1. Percent Battery Check
2. Cranking Check
3. Alternator Check
4. Charging Complete

Could be of use at field days to track battery use with communication equipment.
No country of origin but probably from you-know-where.

Another Outstanding Year for Amateur Radio Licensing!

Last year — 2016 — was another outstanding one for Amateur Radio licensing, says ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma,

AB1FM.s

"New Amateur Radio licenses issued were up by 1% over 2015, and this is the third year in a row that the total number of new licenses has exceeded 30,000," Somma reported. She said 32,552 were granted in 2016, 32,077 in 2015, and 33,241 in 2014.

Somma said that while 2014 was a record-setting year for new licenses issued, ARRL VEC "continues to see an elevated interest in obtaining an Amateur Radio license."

The overall trend continues to be up, up, up! The total number of US Amateur Radio licensees has continued to grow each year since the FCC eliminated the Morse code exam requirement in 2007. Over the past decade, the net number of Amateur Radio licensees has risen by nearly 87,000, according to statistics compiled by ARRL Pacific Section Manager Joe Speroni, AH0A.

As of December 31, 2016, the total number of licensees in the FCC database was 742,787, topping the 2015 total of 735,405, but down just slightly from the all-time high of 743,003 reached last November.

Somma said license upgrades were down by 5% compared to 2015 — 10,617 versus 11,224. "A new Amateur Extra class [question] pool took effect on July 1, 2016, which may have impacted upgrade totals in the second half of the year," she speculated.

As of December 31, according to figures compiled by Speroni, there were 143,337 Amateur Extra licensees, 45, 071 Advanced licensees, 172,807 General licensees, 371,560 Technician licensees, and 10,012 Novice licensees. The FCC no longer issues Advanced and Novice class licenses. The General and Technician licensee totals at the end of last year were all-time highs, and the Amateur Extra total was nearly so.

ARRL Seeks Opinions on Possible New Entry-Level License

An Entry-Level License Committee was established by the ARRL Board of Directors and appointed in September 2016. As part of its ongoing work, the committee is gathering member input and will make recommendations to the Board for possible rules changes to submit to the FCC.

The result could mean changes to the Technician license, but it could also be an additional, but simpler, license with privileges that would give a newcomer a taste of most facets of ham radio, from HF to VHF and UHF.

The committee has created an **online member survey** . Please complete and submit the survey no later than April 7, 2017. Survey results will be published.

Too Many Licenses?

CALLING CQ - ISSUE 76

The ARRL is looking for feedback from members on possible changes in amateur licensing. Specifically, the League is concerned with the age of its members. It seems 30-year-old and younger ham radio enthusiasts are about as rare as a good parking spot downtown. They also see problems with those who obtain a license then quickly fade from the scene.

So, last year they assembled a committee to consider if a new entry-level license is needed – or maybe some tweaking on the existing Technician class license.

I took the survey and made my voice heard and encourage you to do the same.

But, there was no opportunity in the survey to suggest that they just leave things as they are, which would have been my recommendation. Just a week earlier the ARRL touted the news that 2016 yielded another bumper crop of new licensees, more than 30,000 in each of the last few years which seems to suggest that things are good and don't require

Continued on next page------->

adjustment.At least not now…

But trust me, I understand the concern. We don't talk about this much but given our average age and data from actuarial tables, it's safe to say half of everyone who holds an amateur radio license in the United States right this minute will expire over the next twenty years.--Gone.

That's reason enough for worry and doubtless creates sleepless nights for some in Newington. But that dire future doesn't convince me that adjusting the licensing knobs will result in more young amateurs getting into the hobby, and remaining engaged. To be clear, I'm not opposed to giving Technician class licensees more privileges. In fact, I would support just two classes of amateur license.

But that won't compel young people to get with our plan.

If you're waiting for me to reveal some big secret about how to "save" amateur radio you will be disappointed. If I knew exactly what we should do I would have already transmitted that to HQ and would now be preparing for the ticker tape parade in my honor.

But here are a few things I think worth chewing on.

I keep reading that the Maker community is going to become "the next generation of hams" but that seems backwards to me. The Maker movement has been successful engaging youth, but all that tells me is that whatever they're doing is what we ought to be doing, in our own way.

It's worthwhile to take a deep dive into those rare radio clubs who are knocking it out of the ballpark. Like the Essex Ham group in England. Their goals are clear and concise:

1. **Promote:** Explaining Amateur Radio, raising awareness, and encouraging people to get involved.
2. **Support:** Offering help and advice to new radio amateurs.
3. **Share:** Supporting the various amateur radio activities, clubs and training in Essex.

Their success is evident and if we could somehow duplicate that kind of passion all over these United States, those folks in Newington could finally get some sleep.

73, Jeff Davis, KE9V

California has revised its State statutes addressing mobile wireless operation

NOTE: Only portions of this article are listed here

California has revised its State statutes addressing mobile wireless operation. This was done without any advance notice to ARRL Headquarters from radio amateurs in California. This new statute has raised serious concerns since its passage by the State legislature and enactment by the Governor of California for one principal reason: There was included in the prior mobile cellular statute in California a complete exemption for licensed Amateur Radio operators, which was not included in this new legislation. The new legislation completely replaces the earlier legislation. The new legislation reads as follows in part:

(a) A person shall not drive a motor vehicle while holding and operating a handheld wireless telephone or an electronic wireless communications device unless the wireless telephone or electronic wireless communications device is specifically designed and configured to allow voice-operated and hands-free operation, and it is used in that manner while driving.

(f) For the purposes of this section, "electronic wireless communications device" includes, but is not limited to, a broadband personal communication device, a specialized mobile radio device, a handheld device or laptop computer with mobile data access, a pager, or a two-way messaging device.

Furthermore, the foregoing analysis is very technical. ARRL is concerned that law enforcement officers might interpret the new statutory language in the Vehicle Code more broadly than we believe was intended. Law enforcement officers are not necessarily skilled enough in telecommunications technology to be able to make the fine distinctions that radio amateurs are capable of, and they should not be expected to do so where the legislative intent is not clearly expressed.

ARRL East Bay Section
Section Manager: James R Latham, AF6AQ
af6aq@arrl.org

Valley of the Moon Amateur Radio Club

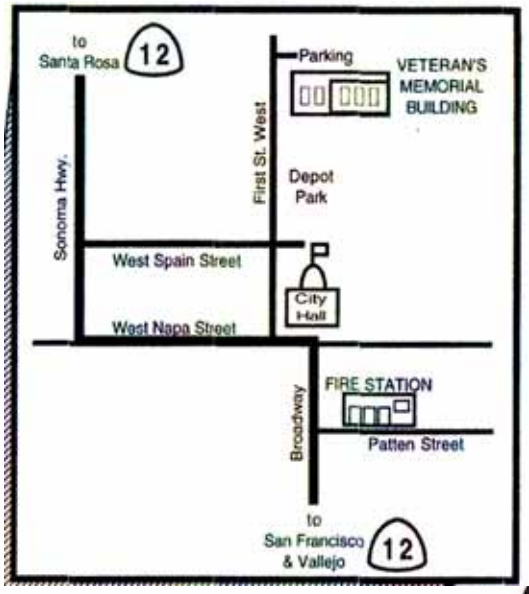
presents

HAMFEST 2017

Saturday, April 29th,
8 am to 12 noon

Featuring

- Swap Meet
- Breakfast
- VE Testing Session
- Station Demos
- Fox Hunt



PLUS: special exhibit of vehicles that support emergency communications
Radio Control helicopter using 70cm.
On the air demo of FreeDV digital voice on HF

Sonoma Veterans Memorial Building
126 First Street West
Sonoma
For info: 707-935-7441

Admission: FREE
Breakfast: $8.00
Talk-in on 145.350 MHz (88.5 pl)
for flyer and map: www.vomarc.org

Sierra Foothills Amateur Radio Club presents:

Hamfest 2017

Saturday, March 18, 2017

Historic Loomis Train Depot

First swap of the Year!

Drawings, Free Parking, Great Seller Spots, Food & Drink available. Last 2 years were fantastic, 2017 should be even better! Come on out and have some fun, talk with buddies and enjoy the swap more Info at: w6ek.org

California (Loomis) — Mar 18 D F H R T V
7:30 – 11 AM. *Spr:* Sierra Foothills ARC. Historic Loomis Train Depot Plaza, 3640 Taylor Rd. *Tl:* 145.43, 223.86 (both 162.2 Hz). *Adm:* Free. **www.w6ek.org.**

Directions:

Located Northeast of Sacramento or Southeast of Auburn, off Interstate 80.

Loomis Exit off I80 - Horseshoe Bar Road Go NNW to the Taylor Road stoplight.

Follow Signs to Buyer's parking.

Seller's go straight at the stoplight, then turn into the Seller's parking area.

Talk in on W6EK/r 145.430 pl 162.2Hz

CQ Hamfest - CQ Hamfest - CQ Hamfest - CQ Hamfest - CQ Hamfest - CQ Hamfest

Saturday, March 4th, 2017 - Benicia, CA

AMATEUR RADIO LICENSE CLASS

Study Session followed by Exam

When: Saturday, March 4th, 2017
7:30 AM - 5:00 PM

Where: Benicia Senior Center
187 East L Street, Benicia

What: Technician Class (beginner's level)
General Class Upgrade (for those already licensed as a Tech)

Fee: $30.00 cash at the door
(Includes exam fee)

Register: www.BeniciaARC.com

Questions: HamRadioClass@BeniciaARC.com or Art at (707) 746-5858

Conducted by:
Benicia Amateur Radio Club (BARC)
Member W5YI VEC
Serving the Benicia Fire Department and the Residents of the City of Benicia

Class size is limited. Advance Registration is Required.
No prep or prior study required.

Prospective Hams should plan on attending a free Get-On-The-Air Class after passing their test, to become familiar with Amateur Radio operations

Reserve Your Space - Become a Ham in One Day!

Can't make the upcoming class? Check our website periodically for our next session.

Element 4 (Extra class) You need only pay the test fee of $14. We do not provide study materials for Element 4.

VVRC Online Renewal

For added security, the online renewal process for the Vaca Valley Radio Club has recently been changed.

In order to renew online you must access the renewal page from the web site home page.
Got to http://w6vvr.net/
Use the "About Us" dropdown menu and select "Membership Application".
This will present you with the application form.
If you are renewing your membership you only need to fill in the name portion of the form. The rest of the form is used for new members. You can, however, use the other fields to make any corrections to your information on file.

Once the form is completed fill in the box at the bottom with the computer-generated characters. This helps keep robots from filling out the form and cluttering up the club's mail box.

When you click on the submit button, you will be taken to the PayPal shopping cart page. This is the page where you can add items to your "shopping cart". When you add an item to the cart, you will be taken to the checkout page. Please consider adding an optional donation to the repeater fund in addition to your dues. This is done by clicking on the "continue shopping" link in the upper right hand corner of the checkout page. Three donation amounts are available. You can add as many of these amounts to the cart as you wish.

Once your "shopping" has been completed you can check out and make your payment. You do not need to have a PayPal account in order to make a payment. They will accept other forms of payment such as credits cards as well.

If all you are doing is making changes to your information, you do not need to make any payment. Just return to the home page when you get to the shopping cart page.

Bob, K6HEW

PLEASE RENEW YOUR MEMBERSHIP

VACA VALLEY RADIO CLUB, INC.

MEMBERSHIP APPLICATION / RENEWAL FORM

Please Print & Fill in Completely — July 2016 — Dues are payable annually

FCC Name: _____ Call Sign_____
Name Badge Name:_____
Street: _____
City: _____Zip: _____
Phone: (_____) _____-_____OK to Publish ?(_____)
License Class: _____ ARRL Memeber ?(_____)
E-Mail Address_____
FAMILY Member (Spouse or Children)
Name: _____ Call Sign_____
License Class: _____ARRL Memeber ?(_____)
Name: _____ Call Sign_____
License Class: _____ARRL Memeber ?(_____)
Name: _____ Call Sign_____
License Class: _____ARRL Memeber ?(_____)

MEMBER Dues --------- $25.00_____
Each Family Member -- $ 2.00_____
Student ---------- $ 5.00_____
Repeater donation ----------_____

Total----------_____
Paid by CASH: ____ Check #_____
DATE:_____

Mail to : Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625-0143